

## REMARKS

The applicants appreciate the Examiner's thorough examination of the subject patent application and request reexamination and reconsideration of the application in view of the preceding amendments and the following remarks.

The Examiner rejects claims 22-70 under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,321,503 in view of U.S. Patent No. 3,818,948 to *Hedges*.

The present invention is directed to a foldable structural member comprising at least a first tube made of layers of material, at least one predetermined hinge area along the length of the first tube, and a plurality of opposing elongated slots in the tube through the layers of material forming separated longitudinal strips of layers of tube material between the slots which fold when subjected to localized buckling forces. See independent claim 22. Independent claims 30, 50, 52, 58 and 65-71 also include the feature of a tube made of layers of material.

The Examiner states that U.S. Patent No. 6,321,503 shows all of the claimed limitations except for the first tube being made of layers of material, an electrical conductor disposed in the tube, at least one transducer device located proximate a hinge area, and a second tube disposed inside the first tube. The Examiner further states that *Hedges* shows a second tube 24 disposed inside the first tube 22 and a foldable structure made of layers of material (22, 24).

It would not have been obvious to one having ordinary skill in the art to modify claims 1-12 of U.S. Patent No. 6,321,503 to include a first tube made of layers of material as taught by *Hedges*. Claims 1-12 of U.S. Patent No. 6,321,503 are directed to a

foldable member designed to be used as a load bearing or support member. See Col. 1, lines 5-7, Col. 4, lines 37-43; and Col. 6, lines 50-59 of the '565 patent. *Hedges*, on the other hand, is directed to a flexible and foldable conduit for use in duct systems carrying heated or cooled air. See Col. 1, lines 9-13; lines 31-34 and lines 44-50 of *Hedges*. One skilled in the art of structural load bearing members would not have been motivated to modify a structural load bearing member with features from a non-structural highly, flexible conduit used in duct systems.

The analysis employed in an obvious-type double patenting determination parallels the guidelines for a 35 USC §103(a) rejection. See MPEP §804 (II)(B)(1).

A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of the invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field ... Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher'." *In re Kotzab*, 217 F. 3d 1365, 1369, 55 USPQ2d 1313, 1316 (Fed.Cir. 2000), quoting *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed.Cir. 1983).

Identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *In re Kotzab*, 217 F. 3d 1365, 1370, 55 USPQ2d 1313, 1316 (Fed.Cir. 2000).

The law is further clear that the teaching of the desirability of combining the references must not come from the applicant's invention. "There must be a reason or suggestion in the art for selecting the procedure used, *other* than the knowledge learned from the applicants' disclosure." See In re Dow Chemical Company, 837 F. 2d 469,473, 5 U.S.P.Q.2d 1529, 1532 (Fed. Cir. 1989) (with emphasis added).

Additionally, the Examiner can satisfy the burden of showing obviousness of the combination *only* by showing some *objective teaching* in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. In re Sang Su Lee, 277 F.3d 1338, 61 USPQ 2d 1430, 1433-44 (Fed. Cir. 2002).

In this case, the Examiner has not, by objective teaching, without benefit of the applicant's claimed invention, established obviousness or that the cited references teach of the desirability of making the specific combination of the applicant's now claimed invention. There is simply no evidence that a flexible duct conduit reference would suggest anything to a designer of structural load bearing support members.

Accordingly, the applicant's independent claims 22, 30, 50, 52, 58 and 65-71, and their respective dependant claims are in condition for allowance.

In the event that the Examiner does not find the above arguments persuasive and maintains the double patenting rejection, the applicant submits herewith a terminal disclaimer to obviate the double patenting rejection. The applicants maintain that the claims of the subject application are not obvious over the claims of the '503 patent in view of *Hedges*, and submit the terminal disclaimer merely to advance the prosecution of the subject application. Both the subject application and the '503 patent are commonly

owned by Foster-Miller, Inc. The '503 patent was assigned to Foster-Miller, Inc. by virtue of the Assignment recorded at Reel 010403 Frame 0288. The subject patent application is a divisional of U.S. Patent No. 6,374,565 which was assigned to Foster-Miller, Inc. by virtue of the Assignment recorded at Reel 010390 Frame 0650.

Accordingly, the subject patent application is also assigned to Foster-Miller, Inc.

Accordingly, the double patenting rejection has been overcome by the terminal disclaimer and claims 22-70 are in condition for allowance.

The Examiner also rejects claim 71 under 36 USC §103(a) as being unpatentable over U.S. Patent No. 2,905,282 to *Miller* in view of *Hedges*.

*Miller* is directed to a collapsible tubular semi-rigid rod. However, *Miller* fails to disclose a plurality of opposing separated multi-ply longitudinal strips between slots in the tube at the hinge area which fold when subjected to localized buckling forces as claimed by applicant in amended claim 71. None of the plurality of members 11, 12, and 13 of *Miller* include a tube having slots in the tube at the hinge areas claimed by the applicant. Additionally, *Hedges* also fails to disclose this feature. And, *Hedges*' flexible conduit simply cannot be used to form the structure recited in claim 71.

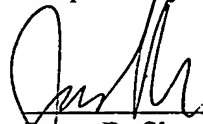
Accordingly, as the combination of references fails to disclose all of the features of the applicant's invention, claim 71 is patentable over the references.

Each of the Examiner's rejections has been addressed or traversed. Accordingly, it is respectfully submitted that the application is in condition for allowance. Early and favorable action is respectfully requested.

If for any reason this Response is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please

telephone the undersigned or his associates, collect in Waltham, Massachusetts, at (781) 890-5678.

Respectfully submitted,



---

Jason D. Shanske  
Reg. No. 43,915